

(19) World Intellectual Property
Organization
International Bureau



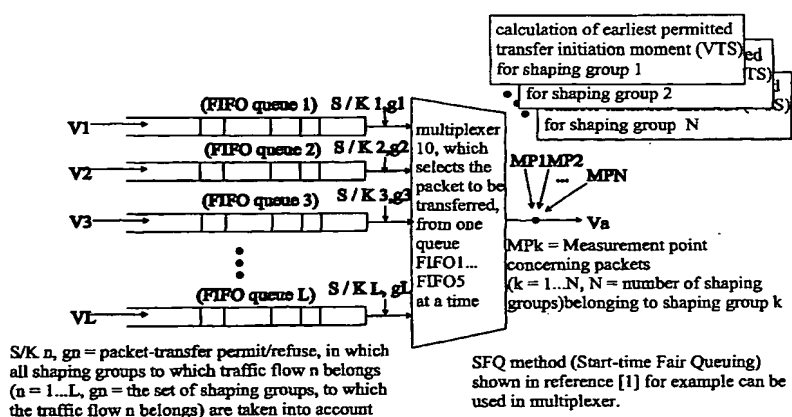
(43) International Publication Date
28 April 2005 (28.04.2005)

PCT

(10) International Publication Number
WO 2005/039123 A1

- (51) International Patent Classification⁷: H04L 12/56, G06F 5/06
- (21) International Application Number: PCT/FI2004/000611
- (22) International Filing Date: 13 October 2004 (13.10.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
20031502 14 October 2003 (14.10.2003) FI
20031525 17 October 2003 (17.10.2003) FI
- (71) Applicant (for all designated States except US): TELLABS OY [FI/FI]; Sinimäentie 6, FI-02630 Espoo (FI).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): VÄÄNÄNEN, Janne [FI/FI]; Laaksoahdentie 74, FI-02730 Espoo (FI).
- (74) Agent: SEPPO LAINE OY; Itämerenkatu 3 B, FI-00180 Helsinki (FI).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND EQUIPMENT FOR PERFORMING AGGREGATE-PORTION-SPECIFIC FLOW SHAPING IN PACKET-SWITCHED TELECOMMUNICATIONS



(57) Abstract: The invention relates to a method and equipment for performing aggregate-portion-specific flow shaping in packet-switched telecommunications, in such a way that the traffic flows (V1-VL) arriving in the system can be arbitrarily bundled into shaping groups and the speed properties (CIR, PIR, CBS) of an aggregate portion formed of packets representing the arbitrary shaping group (k) can be monitored and limited (aggregate-portion-specific shaping group). The invention is based on the fact that the earliest permitted moment, at which a packet in the system can be forwarded, is defined as the greatest value of the VTS values of all the shaping groups to which the traffic flow represented by the packet belongs, and as a result of the forwarding of the packet, the VTS values of the same shaping groups (k) are updated, in which the VTS value of an individual shaping group (k) expresses the earliest permitted moment, at which a packet belonging under the relevant shaping group (k) can be forwarded, without breaking the restrictions of the speed properties of the shaping group (k) being examined.